

JC17 Rec'd PCT/PTO 15 JUN 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A disengagement detection device for detecting the disengagement of a wheel from a vehicle, comprising:  
     detection means for detecting the magnetism inside said vehicle at or near said wheel mounted on said vehicle; and  
     judgment means for judging the disengagement of said wheel from said vehicle based on whether the value of said magnetism detected with said detection means changed by a prescribed threshold value or more, and whether a first stable state centered around a first value changed to a second stable state centered around a second value.
  
2. (Original) A disengagement detection device according to claim 1, wherein said detection means detects magnetisms in a plurality of different directions, and said judgment means judges the disengagement of said wheel from said vehicle based on the comparison of the value of said magnetisms detected with said detection means, and the distribution of the value of the magnetisms detected previously with said detection means in a state where said wheel is mounted on said vehicle.
  
3. (Original) A disengagement detection device for detecting the disengagement of a wheel from a vehicle, comprising:  
     detection means for detecting magnetisms in a plurality of different directions inside said vehicle at or near said wheel mounted on said vehicle; and  
     judgment means for judging the disengagement of said wheel from said vehicle based on the comparison of the value of said magnetisms detected with said detection means, and the distribution of the value of the magnetisms detected previously with said detection means in a state where said wheel is mounted on said vehicle.

4. (Currently Amended) A disengagement detection device according to ~~any one of claims claim 1 to 3~~, further comprising notification means for notifying that the disengagement of said wheel from said vehicle has been detected with said judgment means.

5. (Original) A disengagement detection device for detecting the disengagement of a wheel from a vehicle, comprising:  
a detection step for detecting the magnetism inside said vehicle at or near said wheel mounted on said vehicle; and  
a judgment step for judging the disengagement of said wheel from said vehicle based on whether the value of said magnetism detected by the processing in said detection step changed by a prescribed threshold value or more, and whether a first stable state centered around a first value changed to a second stable state centered around a second value.

6. (Original) A disengagement detection device for detecting the disengagement of a wheel from a vehicle, comprising:  
a detection step for detecting magnetisms in a plurality of different directions inside said vehicle at or near said wheel mounted on said vehicle; and  
a judgment step for judging the disengagement of said wheel from said vehicle based on the comparison of the value of said magnetisms detected by the processing in said detection step, and the distribution of the value of the magnetisms detected previously by the processing in said detection step in a state where said wheel is mounted on said vehicle.